

STRUCTURE OF A SPINDLE OF A MACHINING CENTER

ABSTRACT

5 A spindle of a machining center is equipped with a clutch, which
is fitted to a main spindle housing, and directly connected to a power
source for separable engagement with a shaft coupling sleeve, and which
is guided by sloping guiding trenches of a clutch disk such that a pull rod
of the spindle is actuated for a tool shank housing to be changed between
10 a clamped position and a released one; thus, power of the power source
can be usually provided to the spindle to effect rotation of the spindle for
machining a work piece, and the clutch can be operated for allowing the
pull rod to be directly actuated with power of the power source without
hydraulic mechanisms.

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